Model No.	FYS-18012A/BX-XX
Date / Rev.	2022.08.24/ B

PRODUCT SPECIFICATION

Model No.: FYS-18012A/BX-XX

Descriptions & Features:
■1.80Inch (45.00mm) digit height Single Digit Display
■Case mold type.
■RoHS compliant.
■Low current operation
■Low power consumption.
■Easy mounting on P.C. board or socket.

CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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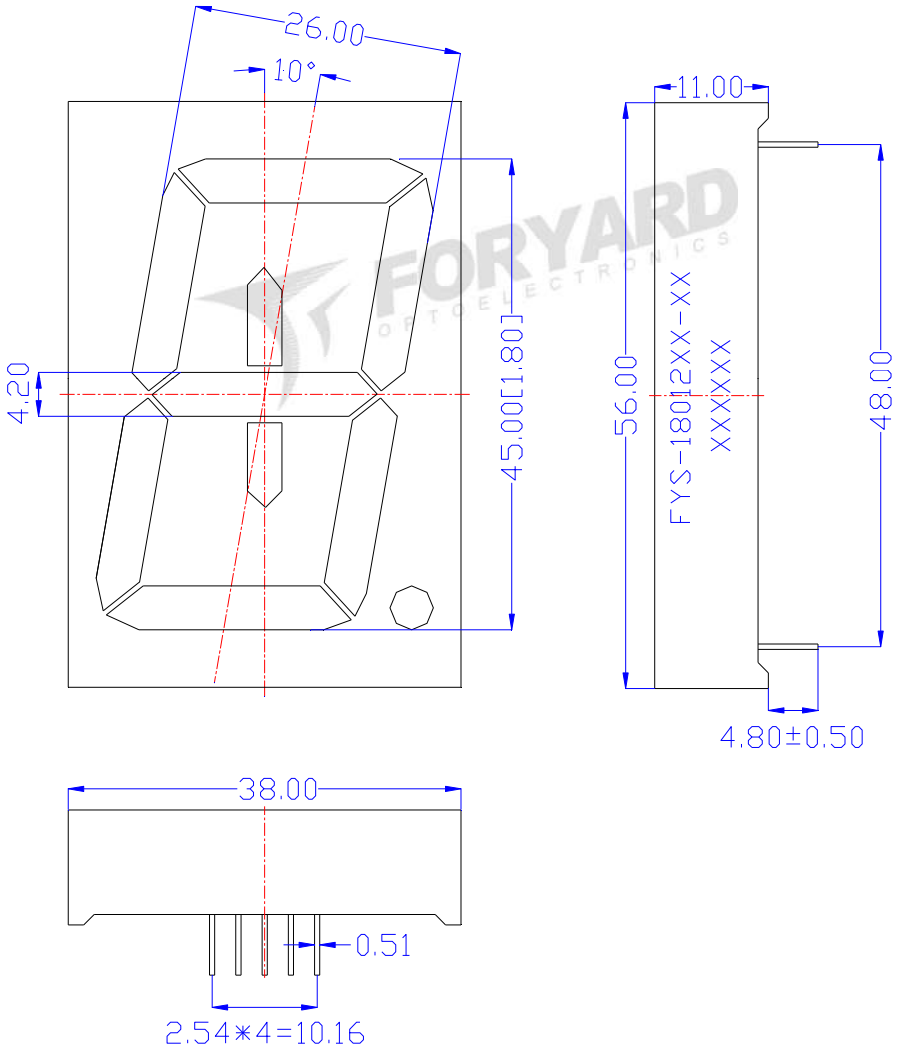
■ -XX: REF Surface / Epoxy color

Color / Number	0	1	2	3	4
REF Surface Color	○ White	○ Black	○ Gray	○ Red	○ Green
Epoxy Color	○ Water Clear	○ White	○ Red	○ Green	○ Yellow

■ Mechanical Dimensions



Notes:

1. All pins are Φ0.51[.020]mm
2. Dimension in millimeter [inch], tolerance is ±0.25 [.010] and angle is ±1° unless otherwise noted.
3. Bending≤Length*1%.
4. The specifications,characteristics and technical data described in the datasheet are subject to change without prior notice.
5. The drawing is different from the actual one, please refer to the sample.

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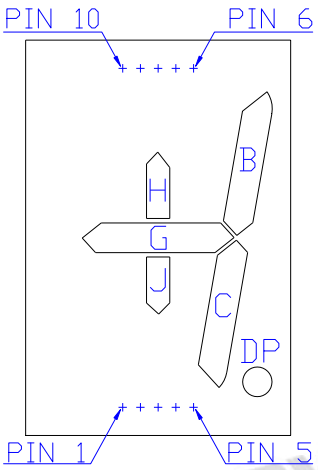
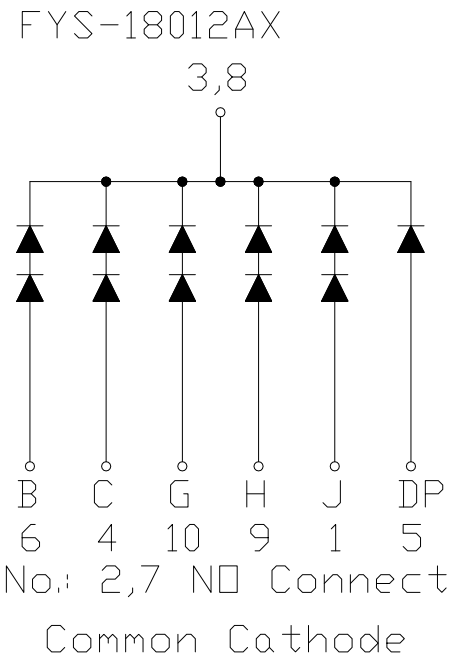
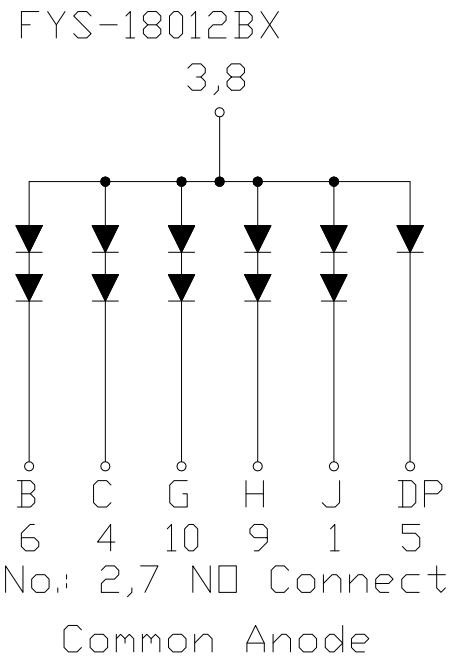
■ All Light On Segments Feature & Pin Position



■ Internal Circuit Diagrams





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■ Absolute maximum ratings

(Ta=25℃)

Parameter	Symbol	Test Condition	Value		Unit
			Min	Max	
Reverse Voltage	VR	IR=30	5	—	V
Forward Current	IF	—	—	30	mA
Power Dissipation	Pd	—	—	100	mW
Pulse Current	Ipeak	Duty=0.1mS,1KHz	—	150	mA
Operating Temperature	Topr	—	-40	+85	℃
Storage Temperature	Tstr	—	-40	+85	℃

■ Electrical-Optical Characteristics

● Color Code & Chip Characteristics:(Test Condition:IF=10mA)

(Ta=25℃)

Emitting Color		Dice Material	Peak Wave Length(λ_P)	Spectral Line halfwidth ($\Delta\lambda 1/2$)	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:mcd
					Typ	Max	
Standard brightness							
S	Hi Red	AlGaInP	660nm	20nm	2.00	2.50	10~20
D	Super Red	AlGaAs/DH	650nm	20nm	2.00	2.50	15~30
E	Orange	GaAsP	625nm	35nm	2.00	2.50	10~21
A	Amber	GaAsP	610nm	35nm	2.00	2.50	10~20
Y	Yellow	GaAsP	590nm	35nm	2.00	2.50	10~20
G	Yellow Green	AlGaInP	570nm	10nm	2.00	2.50	10~20
B	Blue	InGaN	460nm	60nm	3.00	3.80	9~20(mw)
			470nm		3.00	3.80	9~20(mw)
W	White	InGaN/GaN	X=0.29,Y=0.30	CCT:9500K	3.00	3.80	60~120~180
Ultra brightness							
UHR	Ultra Hi Red	AlGaInP	640nm	20nm	2.00	2.50	20~50
UR	Ultra Red	AlGaInP	635nm	20nm	2.00	2.50	40~70
UE	Ultra Orange	AlGaInP	625nm	20nm	2.00	2.50	40~85
UA	Ultra Amber	AlGaInP	610nm	20nm	2.00	2.50	30~105
UY	Ultra Yellow	AlGaInP	590nm	20nm	2.00	2.50	30~135
UG	Ultra Yellow Green	AlGaInP	570nm	30nm	2.00	2.50	20~60
PG	Pure Green	InGaN	520nm	36nm	3.00	3.80	350~450
UB	Ultra Blue	InGaN/GaN	460nm	30nm	3.00	3.80	120~180
		InGaN/GaN	470nm	30nm	3.00	3.80	120~180
UW	Ultra White	InGaN/GaN	X=0.29,Y=0.30	CCT:9500K	3.00	3.80	280~600
Segment-to-Segment Luminous Intensity ratio(Iv-M) 1.5:1							

Note:

1.Luminous Intensity is based on the Foryard standards.

2.Pay attention about static for InGaN

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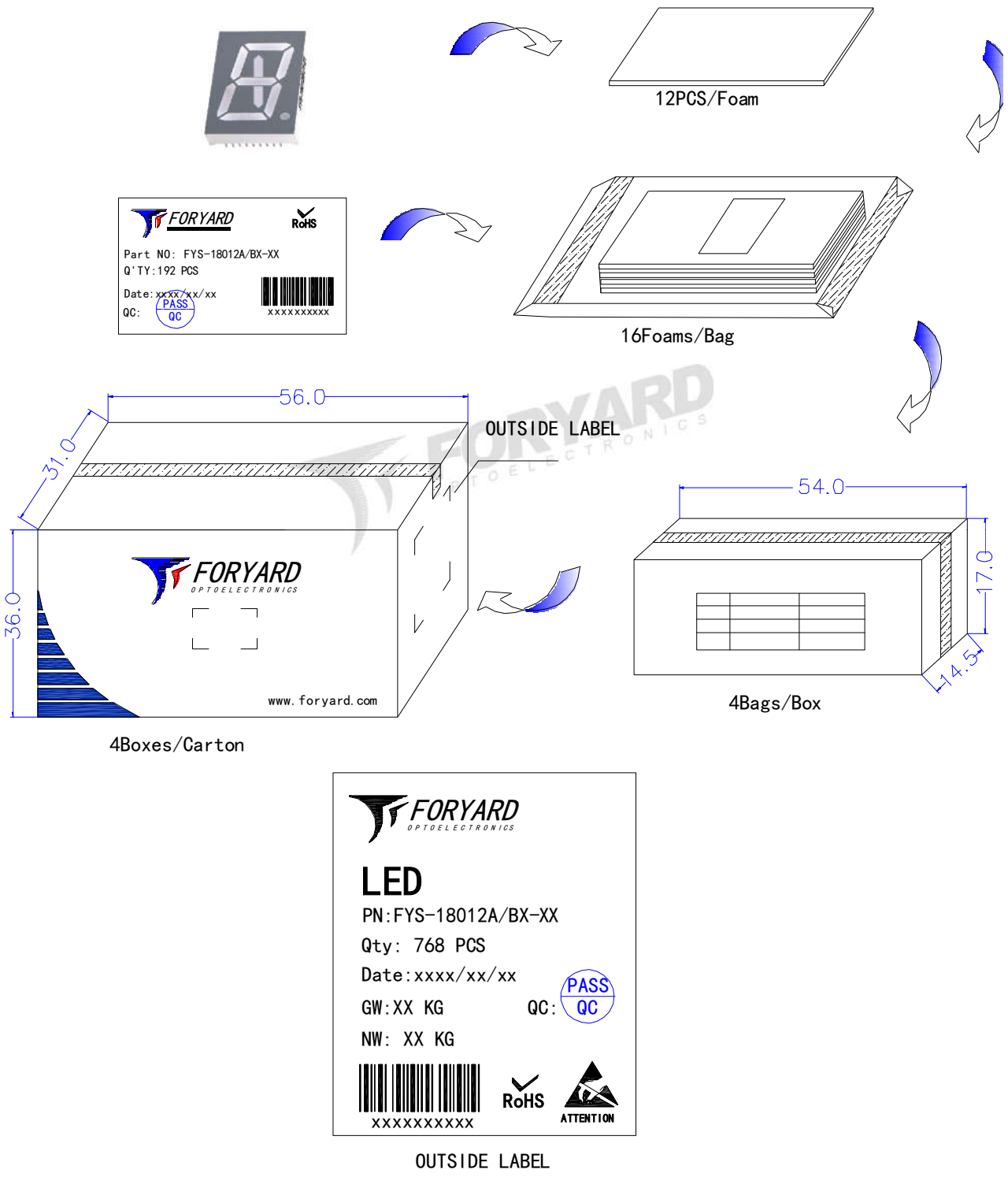
■ Packing Diagram



OUTSIDE LABEL

Note: The specifications are subject to change without notice. Please contact us for updated information.